

3 intensity I(002) at a (002) plane to an X-ray diffraction peak intensity I(110) at a (110) plane of
4 less than 0.2, the negative active material prepared by

5 dissolving a coal tar pitch or a petroleum pitch in an organic solvent to remove insoluble
6 components therefrom;

7 heat-treating the pitch at a temperature in the range of 400 to 450 °C for 4 hours or more
8 under an inert atmosphere to thereby produce at least 50 weight percent of mesophase particles
9 based on the pitch;

10 coking the pitch including mesophase particles;

11 carbonizing the coked pitch;

12 pulverizing the carbonized pitch; and

13 graphitizing the pulverized pitch.

1 2. (Amended) The negative active material of claim 1 wherein the graphite carbon material
2 has an intensity ratio $I(110)/I(002)$ of less than 0.04.

1 3. (Twice Amended) A lithium secondary battery comprising:

2 a negative electrode comprising a negative active material;

3 a positive electrode comprising a lithium containing material that can reversibly intercalate
4 and de-intercalate lithium ion; and

5 a non-aqueous electrolyte;

6 the negative active material comprising a graphite carbon material having an intensity ratio
7 $I(110)/I(002)$ of an X-ray diffraction peak intensity I(002) at a (002) plane to an X-ray diffraction
8 peak intensity I(110) at a (110) plane of less than 0.2 and the negative active material prepared by

9 dissolving a coal tar pitch or a petroleum pitch in an organic solvent to remove insoluble
10 components therefrom;

b) 11 heat-treating the pitch at a temperature in the range of 400 to 450 °C for 4 hours or more
12 under an inert atmosphere to thereby produce at least 50 weight percent of mesophase particles
13 based on the pitch;
14 coking the pitch including mesophase particles;
15 carbonizing the coked pitch;
16 pulverizing the carbonized pitch; and
17 graphitizing the pulverized pitch.

1 4. (Amended) The lithium secondary battery of claim 3 wherein the graphite carbon material
2 has an intensity ratio $I(110)/I(002)$ of less than 0.04.
